INTERNATIONAL ACQUISITIONS BY INDIAN FIRMS – SYNERGY, MANAGERIALISM OR HUBRIS?

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Abstract

Emerging economy firms are increasingly acquiring foreign firms, either buoyed by success at home or as a response to competitive threats from foreign players entering their home markets. These firms are new to the game and it remains to be seen if they have been able to secure gains for their shareholders in the process. This study analyzed international acquisitions by Indian firms and found that shareholder gains are positive overall. However, larger firm size tends to have a negative impact on shareholder returns suggesting that bigger firms may be prone to hubris. Managerialism was not found to be a significant.

INTRODUCTION

Cross-border acquisitions (foreign companies taking over domestic companies) are important international business transactions. Until recently, the acquiring companies used to come invariably from the developed economies but the picture has changed over the past few years. Companies from emerging economies are acquiring foreign firms at a rapid pace, a large number of their targets being in the developed economies. As early as 2004, the number of acquisitions made by emerging economy firms in developed economies were outnumbered by those made by developed economy firms in the emerging economies by 1:4 but the ratio changed to 1:3 by 2006 and further to 1:2 by the end of 2007 (KPMG, 2008).

Acquiring a large number of firms abroad is one thing but doing it successfully is another. Emerging economy firms not only are new to the game but also have very different characteristics than developed country firms. Unlike American firms, a large number of Chinese firms, for example, are owned or controlled by the Chinese government while the ownership and control of a significant number of Indian firms is concentrated in the hands of a few large shareholders (often families). The opportunities and risks of engaging in international acquisitions are therefore likely to be very different for emerging economy firms but there is virtually no empirical investigation into the performance of international acquisitions done by them. The purpose of this study is to find out if acquisitions of foreign firms has been beneficial for Indian firms and to test the applicability of existing theoretical explanations of acquisition performance in the context of Indian firms.

ACQUISITIONS AND SHAREHOLDER WEALTH

Performance of acquisitions has been traditionally measured in terms of shareholder wealth. The logic is that if the acquisition is beneficial to the companies, it will show up in their share prices (assuming the stock market is efficient).

Synergy has been identified as the primary reason for shareholder gains as a result of acquisitions. An acquisition is synergistic when the combination of the acquiring firm and the target firm is worth more than the sum of the values of the acquiring firm and the target firm as independent entities. Bradley, Desai & Kim (1983) produced evidence of synergy and identified several synergy creating mechanisms viz. better management, economies of scale, improved production techniques, the combination of complementary resources, increased market power, redeployment of assets to more profitable uses etc. Empirically, synergy will lead to an overall shareholder gain i. e. the sum of target firm shareholder gains and the acquiring firm shareholder gains shall be positive for a synergistic acquisition.

Roll (1986) argued that the target firm usually has a market price which serves as the lower bound for the valuation of the target by the bidder. Even if the target firm is not publicly traded on a market, the existence of a public firm which is similar to the target firm or the existence of previous deals involving similar firms serves as a benchmark. A rational target firm will not sell below the market price (or the benchmark price) and therefore the target firm should always have positive shareholder gains. In other words, the acquiring firm needs to share the potential synergy gains with the target firm for the transaction to occur i. e. the bidder needs to pay a premium to convince the target to sell. The literature has consistently found that target gains are indeed positive (Jensen, 1988; Harris & Ravenscraft, 1991; Kang, 1993). Synergy is the positive sum of target and acquiring firm gains and since target gains are always positive, an acquisition can be regarded as synergistic if the gains of the acquiring firm shareholders are positive.

Hypothesis 1. Synergistic acquisitions will lead to positive gains for acquiring firm shareholders

The literature suggests two main reasons for shareholder loss through acquisitions namely managerialism and hubris. The managerialism hypothesis (Jensen & Meckling, 1976; Seth, Song & Pettit, 2000) is based on the premise that managers may have goals or interests that are incompatible with the interests of the shareholders. Managers may acquire other firms simply to grow the size of their firms even if a larger firm size reduces shareholder wealth. They may do so for the status and prestige of managing a larger firm or because a larger firm increases their job security. The problem of managerialism shall be greater in firms where owners are different from managers. In a large number of Indian firms, however, the owners not only possess a controlling stake but are also actively engaged in the management of the firm. Such owner-managers are known as **promoters** in India. At the same time, there are many Indian firms where ownership and control is well separated between owners and managers. India therefore provides an ideal setting to test the existence and the consequences of managerialism. When the promoters hold a controlling stake in a firm, there is little scope for managerialism because the owners and the managers are the same. It is reasonable, therefore, to argue that promoter controlled firms will have reduced managerialism and will therefore create higher value through acquisitions.

Hypothesis 2. Firms in which promoters hold a controlling stake shall create greater value through acquisitions than those in which promoters do not have a controlling stake.

Another hypothesis for shareholder loss through acquisitions is the hubris hypothesis (Roll, 1986) according to which the bidder firms overestimate the potential synergies and therefore simply overpay the target. One reason for this is the overconfidence of the managers which leads them to errors. Hubris is hard to measure and therefore many authors take negative gains as evidence of hubris but gains can also be negative due to managerialism and therefore the effects of managerialism and hubris need to be separated. In one of the rare studies that deals with hubris directly, Hayward and Hambrick (1997) showed that CEO overconfidence results in acquiring firms paying a higher premium for the target. Hubris leads to errors in the valuation of the target and such errors can be attributed to the board of directors and owners as much as to the CEO. Large size of the firm and successful prior performance are two possible candidates that can lead to hubris independent of the agency problem. Hayward & Hambrick (1997) used these variables but since the focus of their study was CEO behavior, they reasoned that big size and previous success cause CEO hubris. In contrast, I argue that big size and previous success can make the managers, the board and even the owners prone to over confidence and hence mistakes in target valuation. In a detailed study linking firm size and acquisition returns, Moeller, Schlingemann & Stulz (2004) provide evidence that large firms are more prone to hubris than small firms and therefore acquisitions done by larger firms result in lower returns for their shareholders. In their words, "Managers of large firms might be more prone to hubris, perhaps because they are more important socially, have succeeded in growing the firm, or simply face fewer obstacles in making acquisitions because their firm has more resources" (Moeller et. al. 2004, pp 3).

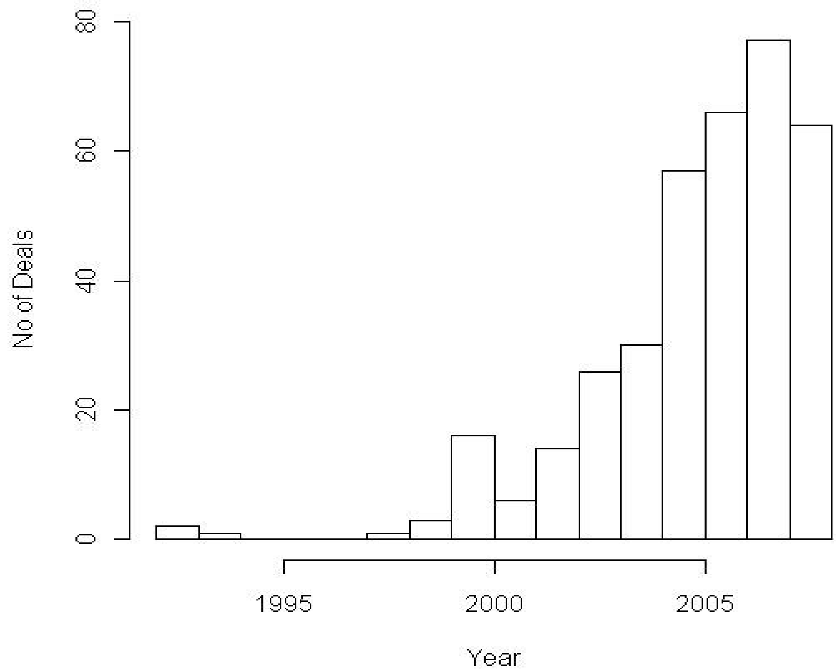
Hypothesis 3. Shareholders of larger firms are more likely to face lower acquisition returns as compared to shareholders of smaller firms.

Hypothesis 4. Successful prior performance will lead to lower acquisition returns.

DATA & METHODS

A list of all completed and majority cross-border acquisitions made by S&P CNX 500 firms was obtained from the Thomson Financial M&A database. S&P CNX 500 is a broad-based benchmark of the Indian capital market. It represented about 84.24% of the total market capitalization and about 78% of the total turnover on the National Stock Exchange (NSE) of India as on March 31, 2008. The S&P CNX 500 companies are disaggregated into 72 industries and the industry weights in the index reflect the industry weights in the market. A total of 365 deals were thus obtained out of which two didn't have an acquisition date. Figure 1 shows the histogram of these deals and reflects the rapid rise of international acquisitions in recent years.

Fig. 1. Histogram of the Number of Deals (N = 363)



Government controlled firms and firms which are majority controlled by foreigners were then excluded because they may have different motivations and constraints than other Indian firms. The acquisition details were verified from various sources e. g. the corporate disclosures to the Indian stock exchanges, newspaper reports etc. Only those deals for which the acquisition details could be verified from multiple sources were included to avoid any measurement errors. When multiple corporate events occurred near the acquisition date, the deals were removed from the sample.

Dependent Variable

The dependent variable is the performance of cross-border acquisitions measured as the change in shareholder wealth. Event study methodology has been used to calculate the cumulative abnormal returns (CAR) for the shares of the acquiring firms on the Indian stock market. This method is the most widely used method for measuring the performance of acquisitions (Harris & Ravenscraft, 1991; Markides & Ittner, 1994). The announcement of acquisition is the event of interest and the reaction of the stock market is used to calculate CAR. The first step is to calculate the abnormal returns ($R_{abnormal}$) as the difference between the actual return and the expected return in the stock market.

Formally, $R_{abnormal}(it) = R_{actual}(it) - R_{expected}(it)$

where $R_{abnormal}$ = abnormal return for firm i in time t and so on

Expected return is calculated using the following model

$R_{expected}(it) = \hat{\alpha} + \hat{\beta}\ R_{market}(it)$ where $R_{market}(it)$ = market return for firm i in time t

The parameters alpha and beta were estimated for a period 136 to 16 days prior to the acquisition announcement date following Doukas & Travlos (1988). Cumulative abnormal return (CAR) for a firm was then obtained by adding the abnormal returns for the firm over a short time window around the announcement date. News of the acquisition may precede the formal announcement by the firm by a day or two or the stock market may take a day or two to react if the announcement is made after the market is closed or if the announcement reaches the whole market with some lag. Total returns over a short time window were therefore used instead of abnormal return on the announcement date. Moreover, there might be errors in measuring the exact announcement date and the short time window helps capture the exact date of the event in that case. Considering the announcement date as day zero, two time windows of -1 to +1 days

(CAR1DAY) and -2 to +2 days (CAR2DAY) were therefore used to calculate CAR. Positive CAR indicates that the acquisition has created value for the shareholders and vice versa.

Independent Variables

Promoter Stake – A binary variable representing the presence or absence of a controlling stake by the promoters of the Indian firm making the acquisition. Promoters are owners that are actively engaged in the management of the firm. The data was obtained from the two main stock exchanges in India – the National Stock Exchange and the Bombay Stock Exchange. A value of one represents more than 50% stake and a value of zero represents less than or equal to 50% stake.

Firm size – Firm size has been measured as the log of net sales in the closest quarter one year prior to the acquisition date. The process for the selection and evaluation of target starts much before the acquisition announcement date and therefore the sales figure are measured one year prior to the announcement date. Quarterly figures were used instead of yearly figures to ensure that the same time period is used for all deals e. g. if yearly March figures would have been used, acquisitions made in April would have a different time period between the time the sales is measured and the announcement date than the acquisition made in December.

Firm performance - Prior firm performance is measured as the ratio of net profit to net sales in the closest quarter one year prior to the acquisition date. Quarterly figures one year prior to the announcement date were used for reasons discussed above.

Control Variables

Previous literature suggests that related acquisitions are likely to result in greater shareholder gains than unrelated acquisitions. An acquisition was termed related and coded as one if the 2-digit SIC code of the acquiring firm industry and the target firm industry were the same. The unrelated acquisitions were coded as zero. Prior acquisition experience in the target country and general experience of making international acquisitions has also been found to positively influence acquisition performance. Prior acquisition experience in the target country was measured as the number of acquisitions made in the target country previous to the deal in the sample. International acquisition experience was measured as the number of international acquisitions done previous to the deal in the sample. Another variable that can affect the acquisition performance is the exchange rate between the currencies of the acquiring firm country and the target firm country. Fluctuations in the exchange rate will affect not only the valuation of the deal but also the reaction of the stock market. While the firm may take into account long-term fluctuations before choosing the target, short term fluctuations are much harder to predict. The variable was therefore measured as the change in the value of target country currency vis a vis the home currency (Indian Rupee) on the announcement date, as compared to its value one year before the announcement date. In other words, the variable represents the change in the strength of the home currency (Indian Rupee) relative to the host currency.

A final list of 246 deals was obtained for which all the variables were available. The summary statistics is presented in Table 1 and the correlation matrix is tabulated in Table 2.

Table 1. Summary Statistics

	Min	Q1	Median	Mean	Q3	Max
CAR1DAY	-16.54	-1.35	1.13	1.57	3.68	25.55
CAR2DAY	-17.92	-1.47	1.18	1.92	5.53	38.11
Firm Size	4.540	7.320	7.981	8.163	9.057	12.560
Firm Performance	-0.148	0.076	0.125	0.144	0.201	0.611
Exchange Rate	-28.230	-6.157	-0.090	-0.410	5.692	16.450
Promoter Stake			1 – 111, 0 – 135			
Relatedness			1 – 170, 0 – 76			
Prior Experience			1 – 69, 0 – 177			
Int Experience			1 – 174, 0 – 72			

Table 2. Correlation Matrix

	CAR1DAY	CAR2DAY	Exchange Rate	International Experience	Prior Experience	Relatedness	Promoter Stake	Firm Performance	Firm Size
CAR1DAY	1.0000	0.8037	0.0310	-0.0874	0.0824	-0.0826	0.0206	-0.0739	-0.1379
CAR2DAY	0.8037	1.0000	0.0162	-0.0969	0.0611	-0.0708	-0.0428	-0.1381	-0.1372
Exchange Rate	0.0310	0.0162	1.0000	-0.0477	0.0902	-0.0530	0.0048	0.0296	-0.0815
International Experience	-0.0874	-0.0969	-0.0477	1.0000	0.4016	0.0726	-0.0631	0.1575	0.2983
Prior Experience	0.0824	0.0611	0.0902	0.4016	1.0000	-0.0917	-0.0024	0.1672	0.0932
Relatedness	-0.0826	-0.0708	-0.0530	0.0726	-0.0917	1.0000	0.0936	0.0672	-0.0865
Promoter Stake	0.0206	-0.0428	0.0048	-0.0631	-0.0024	0.0936	1.0000	0.1895	-0.1011
Firm Performance	-0.0739	-0.1381	0.0296	0.1575	0.1672	0.0672	0.1895	1.0000	-0.0296
Firm Size	-0.1379	-0.1372	-0.0815	0.2983	0.0932	-0.0865	-0.1011	-0.0296	1.0000

RESULTS & DISCUSSION

One sample t-tests were performed on CAR1DAY and CAR2DAY to ascertain if these are significantly different from zero (Table 3). Both CAR1DAY and CAR2DAY were significantly positive. In other words, international acquisitions by Indian firms, on average, brought gains to their shareholders. The acquisitions were therefore synergistic in general (Hypothesis 1).

Table 3. One Sample t-tests for CAR

	t	df	95% Confidence Interval	
CAR1DAY	4.832	245	0.93	2.2
CAR2DAY	4.543	245	1.09	2.75

The regression results are tabulated in Table 4. Firm size was significantly negative for both CAR1DAY and CAR2DAY. Firm performance was significant for CAR2DAY but not for CAR1DAY. These results confirm that larger firms are prone to hubris, leading to a negative impact on shareholder wealth. Results for firm performance were mixed and therefore further studies are needed before a strong conclusion can be made. The promoter stake was not significant in any of the models and therefore there was no evidence of any significant influence of managerialism. The relatedness of the target industry with the acquiring firm industry was not significant. This result supports the argument that relatedness alone is not sufficient for positive shareholder gains (Barney, 1983). Changes in the value of target currency with respect to the home currency (Indian Rupee) were also insignificant. This may be due to the fact that a large number of Indian firms have used the international financial markets to raise money and therefore the financing of the deal may be independent of the home currency fluctuations vis a vis the target country currency. The acquisition experience in the target country was significantly positive in both models while the international experience was not significant in either. These results lend support to Haleblian and Finkelstein's (1999) argument that inappropriate generalization of previous experience to dissimilar situations may not lead to performance benefits.

Table 4. Regression Results

	CAR1DAY (-1 to +1)	P-value		CAR2DAY (-2 to +2)	P-value	
Intercept	6.8891	0.0015	**	9.7838	0.0005	***
	2.1397			2.7721		
Firm Size	**-0.4862**	**0.0501**	**+**	**-0.6547**	**0.0417**	*****
	0.2469			0.3198		
Firm Performance	**-4.9389**	**1.1837**		**-10.3367**	**0.0323**	*****
	3.7045			4.7993		
Promoter Stake	**0.2624**	**0.6925**		**-0.3970**	**0.6444**	
	0.6629			0.8589		
Exchange Rate	0.0016	0.9673		-0.0074	0.8862	
	0.0398			0.0516		
Relatedness	-0.7908	0.2674		-0.7595	0.4107	
	0.7113			0.9216		
Prior Experience	1.5277	0.0566	+	1.8615	0.0728	+
	0.7973			1.0329		
Int Experience	-0.9089	0.2692		-1.2086	0.2568	
	0.8207			1.0632		
R-sq	0.0496			0.0591		
F	1.775			2.135		
N	246			246		

CONCLUSION

International acquisitions done by Indian firms have created value for their shareholders in general. Large firms, however, had a negative impact on shareholder returns due to hubris. They need to be careful, therefore, not to overstep the boundaries of caution while exploring opportunities abroad. Managerialism was not found to be significant and therefore the returns are similar irrespective of whether owners themselves are managers or not. Either the problem of managerialism is not as severe as the theory suggests or the mechanisms to contain errant behavior of managers are strong enough to prevent them from going astray.

REFERENCES

Barney, J. B. 1983. Returns to bidding firms in mergers and acquisitions: Reconsidering the relatedness hypothesis. *Strategic Management Journal.*

Bradley, M., Desai, A., & Kim, E. H. 1983. The Rationale behind Interfirm Tender Offers : Information or Synergy? *Journal of Financial Economics.*

Doukas, J., & Travlos, N. G. 1988. The Effect of Corporate Multinationalism on Shareholders' Wealth: Evidence from International Acquisitions. *Journal of Finance.* 43(5), 1161-1175

Haleblian, J. & Finkelstein, S. 1999. The Influence of Organizational Acquisition Experience on Acquisition Performance: A Behavioral Learning Perspective. *Administrative Science Quarterly.*

Harris, R. S., & Ravenscraft D. 1991. The Role of Acquisitions in Foreign Direct Investment: Evidence from the U.S. Stock Market. *Journal of Finance.*

Hayward, M. L. A., & Hambrick, D. C. 1997. Explaining the Premiums Paid for Large Acquisitions : Evidence of CEO Hubris. *Administrative Science Quarterly.*

Jensen, M., & Meckling, W. 1976. Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure. *Journal of Financial Economics.*

Jensen, M. C. 1988. Takeovers: Their Causes and Consequences . *Journal of Economic Perspectives.* 2 (1), 21-48.

Kang, J. K. 1993. The international market for corporate control : Mergers and acquisitions of U.S. firms by Japanese firms. *Journal of Financial Economics.* 34 (3), 345-371.

KPMG. 2008. Emerging Market International Acquisitions Tracker. http://www.kpmg.com/Global/IssuesAndInsights/ArticlesAndPublications/Pages/The-EMIAT-2008-edition.aspx Accessed 10 January, 2009.

Markides, C. C. & Ittner, C. D. 1994. Shareholder Benefits from Corporate International Diversification: Evidence from U.S. International Acquisitions. *Journal of International Business Studies* 25, 343-366.

Moeller, S. B., Schlingemann, F. P., & Stulz, R. M. 2004. Firm size and the Gains from Acquisitions. *Journal of Financial Economics.*73(2), 201-228

Roll, R. 1986. The Hubris Hypothesis of Corporate Takeovers. *Journal of Business.* 59(2), 197-216.

Seth, A., Song, K. P., & Pettit, R. 2000. Synergy, Managerialism or Hubris? An empirical Examination of Motives for Foreign Acquisitions of U.S. Firms. *Journal of International Business Studies.*

APPENDICES

Appendix A. Distribution of Deals by Target Country

No of Deals	Country
80	United States
29	United Kingdom
17	Germany
11	Italy
9	Singapore, South Africa
7	France
6	Canada, Belgium
5	Netherlands, Malaysia
4	Poland, Spain, Switzerland
3	Norway, Czech Republic, Thailand, Portugal
2	Brazil, Japan, Sweden, Russia, Ireland, Romania
1	Bangladesh, Venezuela, Bulgaria, Saudi Arabia, Peru, Denmark, Egypt, Israel, Chile, China, Cyprus, South Korea, Nigeria, Fiji, Greece, Hungary

Appendix B. Distribution of Deals by Industry

2 digit SIC Code	Industry	No of Deals
28	Chemicals and allied products	82
73	Business services	61
37	Transportation equipment	17
22	Textile mill products	14
36	Electrical and electronic equipment	11
35	Industrial machinery and equipment	9
33	Primary metal industries	6
30	Rubber & miscellaneous plastics products	6
20	Food and kindred products	6
39	Miscellaneous manufacturing industries	5
34	Fabricated metal products	4
87	Engineering and management services	4
70	Hotels, rooming houses, camps, and other lodging place	3
32	Stone, clay, glass, and concrete products	3
15	General building contractors	2
48	Communications	2
60	Depository institutions	1
50	Wholesale trade – durable goods	1
13	Oil and Gas Extraction	1
82	Educational services	1
67	Holding and other investment offices	1
23	Apparel and other textile products	1
27	Printing and Publishing	1
31	Leather and leather products	1
49	Electric, gas, and sanitary services	1
46	Pipelines, except natural gas	1
16	Heavy construction contractors	1
	Total	246